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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

eant(s): Lee

Application No.: 10/564,895

Filed: 1/17/2006

Title: Improved 3D Velocity Modeling, with Calibration and Trend Fitting using Geostatistical Techniques, Particularly Advantageous for Curved-Ray

Prestack T

Attorney Docket No.: 50243

Art Unit:

Examiner:

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

RESPONSE TO OFFICE ACTION MAILED 5/3/6 MISSING REQUIREMENTS UNDER 35 USC 371 (Copy Attached)

Dear Sir:

Applicant did miscalculate the number of independent claims in the submission under 35 USC 371, based on the published application. (Applicant notifies the Office that the published application misprinted some claims.) (Also, please note that the inventor/applicant is "Wook B. Lee.")

In the submission under Section 371, however, applicant <u>did</u> authorize the commissioner to charge any additional fees to deposit account 50-1753 (50243.) See page 2 of the Submission under 35 USC Section 371, copy attached. Applicant submits, therefore, that a "late fee" is inappropriate in this case. Nonetheless, a check for \$165.00 is attached to avoid any possible delay of the application. Please credit the deposit account, as requested, if you agree that a late fee is inappropriate.

Attached also find a copy of the transmittal letter to the United States Receiving Office including the "declaration of inventorship." The return postcard indicates receipt by the PCT on 5 August 2004, copy also attached.

05/30/2006 GFREY1 00000121 10564895

01 FC:2617 02 FC:2614 65.00 OP 100.00 OP If the PTO is <u>unable</u> to locate the prior filed declaration, applicant will submit a new one upon your further indication that the identified prior submitted declaration has been misplaced.

Respectfully Submitted,

Sue Z. Shaper

Attorney/Agent for Applicant(s)

Reg. No. 31663

Sue Z. Shaper 1800 West Loop South, Suite 1450 Houston, Texas 77027 Tel. 713 550 5710

Page 1 of 24

TES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vinginia 22313-1450 www.napto.gov

U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO. 10/564,895 Wook B. Lee Seislink 50243 INTERNATIONAL APPLICATION NO. PCT/US04/23456 I.A. FILING DATE PRIORITY DATE 07/22/2004 07/23/2003

Sue Z. Shaper 1800 West Loop South, Suite 1450 Houston, TX 77027

> **CONFIRMATION NO. 3431 371 FORMALITIES LETTER**

OC000000018666488

Date Mailed: 05/03/2006

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Copy of the International Application filed on 01/17/2006
- Copy of the International Search Report filed on 01/17/2006
- Copy of IPE Report filed on 01/17/2006 :
- Preliminary Amendments filed on 01/17/2006
- Request for Immediate Examination filed on 01/17/2006
- U.S. Basic National Fees filed on 01/17/2006
- Priority Documents filed on 01/17/2006
- Specification filed on 01/17/2006
- Claims filed on 01/17/2006
- Abstracts filed on 01/17/2006
- Drawings filed on 01/17/2006

The applicant needs to satisfy supplemental fees problems indicated below.

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Additional claim fees of \$100 as a small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are
- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.

To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath
or declaration) as set forth in 37 CFR 1.492(h) of \$65 for a small entity in compliance with 37 CFR 1.27,
must be submitted with the missing items identified in this letter.

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$165 for a Small Entity:

- \$65 Surcharge.
- Total additional claim fee(s) for this application is \$ 100
 - \$100 for 3 independent claims over 3.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

PAULETTE R KIDWELL

Telephone: (703) 308-9140 EXT 216

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/564,895	PCT/US04/23456	50243

FORM PCT/DO/EO/905 (371 Formalities Notice)

MAY 2 3 2006

Typed or printed name

Sue Z. Shaper

PTO/SB/21 (09-04)

Date

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE e Paper Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. **Application Number** 10/564,895 Jan 17, 2006 TRANSMITTAL Filing Date **FORM** First Named Inventor Lee, Wook **Art Unit Examiner Name** (to be used for all correspondence after initial filing) **Attorney Docket Number** 50243 Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance Communication to TC Drawing(s) Fee Transmittal Form Appeal Communication to Board of Licensing-related Papers Fee Attached Appeals and Interferences Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) Petition Amendment / Reply Petition to Convert to a **Proprietary Information** After Final Provisional Application Power of Attorney, Revocation Change Status Letter Affidavits/declaration(s) of Correspondence Address Other Enclosure(s) (please identify Х Terminal Disclaimer **Extension of Time Request** Response to Missing Requirements **Express Abandonment Request** Request for Refund mailed 5/3/06 CD. Number of CD(s) __ Copy of prior submitted declaration Information Disclosure Statement Landscape Table on CD Certified Copy of Priority Document(s) Remarks It is believed that no further request for extension of time or fees are due. Notwithstanding, the Reply to Missing Parts/ Incomplete х Commissioner is authorized to charge any additional fees incurred or credit any overage to Deposit Application Account No.50-1753 (50243). Please regard this as a further request for extension of time to the extent Reply to Missing Parts one is needed. (Customer Account Number 22929) under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name Signature Printed name Sue Z. Shaper 31663 Reg. No. Date May 23, 2006 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage via Express Mail EV 671531330 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below. Signature May 23, 2006

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

In you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMNT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. ATTORNEY'S DOCKET NUMBER TRANSMITTAL LETTER TO THE UNITED STATES 50243 DESIGNATED/ELECTED OFFICE (DO/EO/US) U.S. APPLICATION NO. (If known, see 37 CFR 1.5) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 PRIORITY DATE CLAIMED INTERNATIONAL FILING DATE INTERNATIONAL APPLICATION NO. 7/23/2003 ア/ミセ/64 PCT/US2004/023,456 TITLE OF INVENTION Improved 3D Velocity Modeling, with Calibration and Trend Fitting using Geostatistical Techniques, Particularly Advantageous for Curved-Ray Prestack Time Migration and for such Migration Followed by Prestack Depth Migration APPLICANT(S) FOR DO/EO/US Wook B. Lee - Seislink Corporation, Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: 1. X This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. 3. X This is an express request to begin national examination procedures (35 U.S.C. 371 (f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371 (c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. c. X is not required, as the application was filed in the United States Receiving Office (RO/US). 6. An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. d. X have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). (on file in PCT application) An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. (to follow) An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. X A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. A substitute specification. A power of attorney and/or change of address letter. 16. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825. 17. A second copy of the published International Application under 35 U.S.C. 154(d)(4).

This collection of information is required by 37 CFR 1.414 and 1.491–1.492. The Information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).

19. 20.

Other items or information:

PTO-1390 (Rev. 12-2004)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMNT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)			INTERNATIONAL APPLICATION NO. PCT/US2004/023,456			ATTORNEY'S DOCKET NUMBER 50194			
21.	The follow	ving fees	re submit	tted:	,				
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TRANSMITTAL LETTER TO THE UNITED STATES RECEIVING OFFICE

· Date	· ,—	August 5, 2004	
International Application No.		PCT/US 04/23456	
Attorney Docket No.		50194	

	A STORM 40 (Kanaliashia)						
I. Certific	ation under 37 CFR 1.10 (If applicable)	7	August 5, 2004				
ļ	977589217 Express Mail mailing number	-	Date of Deposit				
I hereby certify to Addressee's Alexandria, VA	hat the application/correspondence attach ervice under 37 CFR 1.10 on the date indi	ed hereto is being deposited with the cated above and is addressed to Ma	United States Postal Service	"Express Mail Post Office or Patents, PO Box 1450,			
Alexandria, VA	200		Sue Z. Shaper				
Signa	ture of person mailing correspondence	Typed or	printed name of person mailing	g correspondence			
	New International Application		Sodio	est priority date			
TITLE	Improved Velocity Modeling with 3 D Si	esmic	(Day	st priority date //Month/Year) 3 Jul 2003			
of de	EENING DISCLOSURE INFORMATION: termining whether a license for foreign transied: (Note: check as many boxes as application disclosed was not made there is no prior U.S. application related to the following prior U.S. application(s) international application. (NOTE: prior transitional prior U.S. application.	nsmittal should and could be granted y): in the United States. Ing to this invention. contain subject matter which is related.	and for other purposes, the fo	ollowing information is			
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III. A. [B. [C. [and DOES NOT ALTER which would require the U.S. applicati U.S.C. 181 and 37 CFR 5.1. See 37 Response to an invitation from the RO A Request for An Extension of Time t A Power of Attorney (General or Regular Replacement pages:	CFR 5.15. /US. The following document(s) is(a o File a Response	nspection by the appropriate d				
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1 4 6	Priority document		Priority document				
Fees as specified on attached Fee Calculation sheet form PCT/RO/101 annex - It is believed that no further fees are due. Notwithstanding, the Commissioner is authorized to charge any additional fees incurred or credit any overage to Deposit Account No.50-1753 (50194).							
Ⅳ A	Request for Rectification under PCT 9	1 A Petition A	Sequence Listing Diskette)			
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	Applicant		Sue Z. Shaper				
The person signing this form is the:	X Attorney/Agent (Reg. No.) 3166	3	Typed name of signer				
	Common Representative	7265	Stry Cust. # 22,929				

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I hereby certify that this is being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR § 1.10 on the date indicated below and is addressed to:	
Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450 By: Typed Name: Sue Z Shaper	ņa V
Express Mail Label No.: <u>EV 785080757 US</u> Date of Deposit: <u>1-15-</u> 06	

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